Abstract

The invention relates to a method for recovering a database provided with disk back-up. A database comprising a first generation and at least one mature

5 generation is maintained in a central memory. The generations contain memory cells in which data and additionally pointers constituting references between memory cells are stored. Generation-specific remembered sets are maintained in the area of mature generations in the central memory. Live memory cells in the area of the first generation are periodically collected as a

10 new mature generation into the central memory into the area of mature generations. Garbage collection is performed generationally in the area of mature generations, in which live memory cells are copied in the order indicated by the remembered set into a temporally more recent mature generation. As the garbage collection proceeds, changes to the references

15 between generations are made in the area of mature generations in a generation that has already been stored in disk memory. To improve the efficiency of the system, at least some of said changes are made in the central memory only, the disk memory maintains, in addition to the most current version of the mature generation stored on disk, the previous version stored on

20 disk, and recovery is performed by means of said versions (a) by reconstructing the remembered set of said previous version stored on disk, and (b) by changing the pointers indicated by the remembered set to refer to the memory cells of said most current version.

25 (Figure 3)